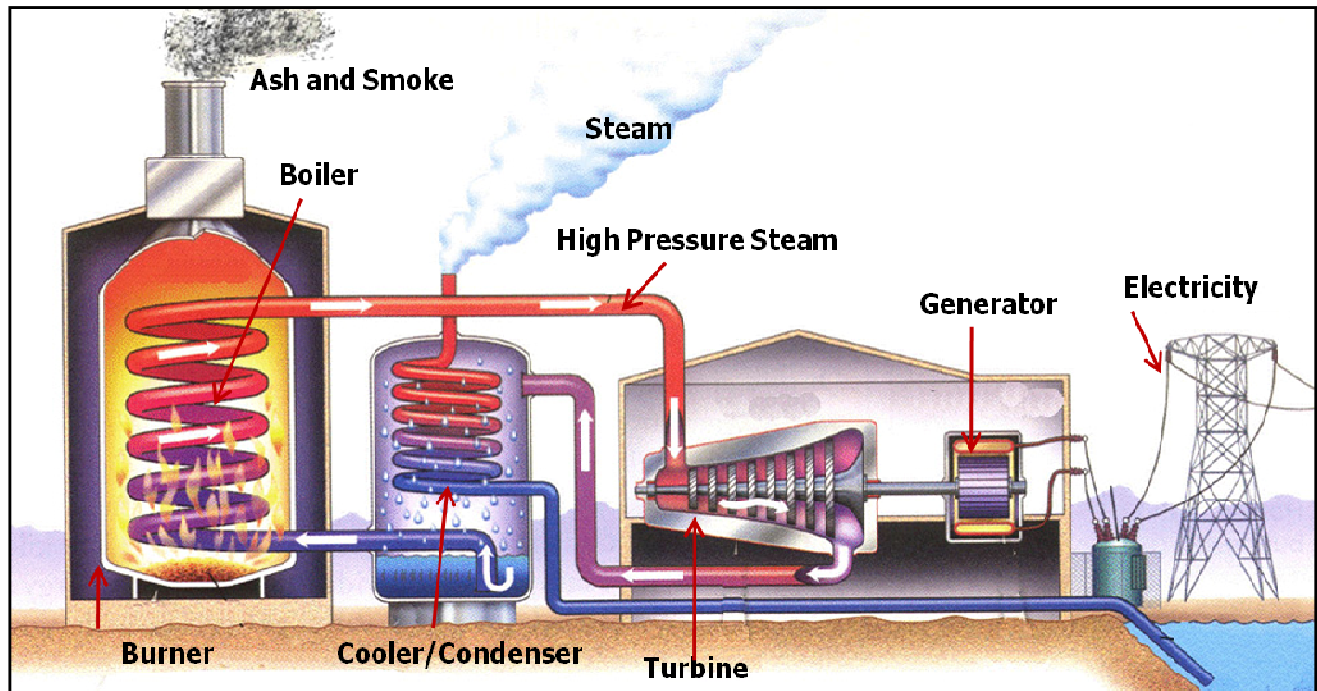


## Where does our Electricity come from?



The electricity we use in our homes, schools and businesses can come from many sources. One of the most common is the *Thermal Power Station*. To understand how it works, we need to consider Energy Transformations and Energy Systems. Answer the following questions in your notebook.

- 1) What happens in the burner and boiler?
- 2) What is the cooler/condenser for?
- 3) What happens in the turbine?
- 4) How is electricity produced from this process?
- 5) How does the electricity get to us?
- 6) Describe the Thermal Power Station as an Energy System. Assume the energy input is Chemical (fuel). What are the energy transformations, transfers, outputs and wastes?

### Research.

Use the Environmental Science Text (pages 157-178) to answer the questions below. You do not need to read all the text. You should scan each section and look for key vocabulary, images and other forms that will help you answer the questions efficiently.

- 7) What different sources of energy can be used to produce electricity?
- 8) What is meant by renewable and nonrenewable energy sources?
- 9) Which sources (from Q6) are renewable?